

IN THE CLAIMS:

1. A system for reading an optical code and verifying the read optical code comprising:

an imaging engine having an array of image sensors for sensing an image of an object
5 and an optical code associated with the object and generating respective object image data and optical code image data;

a database storing a plurality of digital codes and an object image data entry associated with each respective digital code of the plurality of digital codes, wherein the object image data entry associated with a digital code of the plurality of digital codes represents at least one image
10 of an object that is assigned the digital code; and

a processing unit for receiving the object image data and the optical code image data from the imaging engine, said processing unit comprising:

a code generation software module for generating at least one digital code that corresponds to the optical code image data;

15 a database query module for accessing at least one object image data entry stored in the database associated with at least one respective stored digital code that substantially matches the respective at least one generated digital code; and

a comparator module for comparing the generated object image data with the at least one accessed object image data entry.

20 2. The system according to Claim 1, wherein the optical code image data is extracted from the object image data.

3. The system according to Claim 1, wherein the imaging engine images the optical code during a first imaging operation and generates the optical code image data and images the object during a second imaging operation and generates the object image data.

5 4. The system according to Claim 1, wherein the stored object image data entry associated with a digital code of the plurality of stored digital codes includes non-image data indicative of at least one characteristic of the object assigned the digital code.

10 5. The system according to Claim 1, wherein the stored object image data entry associated with a digital code of the plurality of stored digital codes includes data extracted from an image of the object assigned the digital code.

15 6. The system according to Claim 1, wherein the stored object image data entry associated with a digital code of the plurality of stored digital codes includes a plurality of image sub-entries; and

respective image data sub-entries correspond to different views of the object assigned the digital code.

20 7. The system according to Claim 1, wherein the processing unit further comprises a face determination module for determining data of the generated object image data corresponding to at least one face of the object imaged by the imaging engine.

8. The system according to Claim 1, wherein the processing unit further comprises a data extraction module for extracting data from the generated object image data.

9. The system according to Claim 8, wherein the extracted data is indicative of at least one characteristic of the object imaged by the imaging engine.

10. The system according to Claim 1, wherein the code generation software module includes an optical character recognition (OCR) software module for performing optical character recognition processing on the optical code image data for generation of the at least one digital code.

11. The system according to Claim 1, wherein the code generation software module further generates an estimated accuracy score associated with each generated digital code of the at least one digital code.

12. The system according to Claim 10, wherein the generated at least one digital code is a textual code.

13. The system according to Claim 1, wherein the comparator module determines if the comparison results are within a predetermined image recognition certainty threshold.

14. A method for verifying an optical code read comprising the steps of:

receiving optical code image data and object image data associated with the optical code read and an object associated with the optical code, respectively;

generating at least one digital code in accordance with the optical code image data;

5 querying a database for accessing at least one stored object image data entry associated with at least one stored digital code that substantially matches the at least one generated digital code; and

comparing the received object image data with the at least one accessed object image data entry.

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15. The method according to Claim 14, wherein the generating step includes the step of performing optical character recognition on the received optical code image data for generating the at least one digital code.

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16. The method according to Claim 14, further including the step of generating an estimated accuracy score associated with each generated digital code of the at least one digital code.

17. The method according to Claim 14, wherein the generated at least one digital code
20 is a textual code.

18. The method according to Claim 14, wherein the at least one accessed object image data entry includes data indicative of at least one characteristic of the object assigned the matching stored digital code; and

further including the step of extracting from the received object image data, data
5 indicative of at least one characteristic of the object imaged by the imaging engine; and
the comparing step includes comparing the data indicative of the at least one characteristic of the respective at least one accessed object image data entry and the received object image data.

10 19. The method according to Claim 14, further comprising the step of determining if the comparison results are within a predetermined image recognition certainty threshold.

20. A system for image verification of an optical code read comprising:
means for receiving optical code image data and object image data associated with the
15 optical code read and an object associated with the optical code, respectively;
means for generating at least one digital code in accordance with the optical code image data;
means for querying a database for accessing at least one stored object image data entry associated with at least one respective stored digital code that matches the respective at least one
20 generated digital code; and
means for comparing the received object image data with the at least one accessed object image data entry.

21. The system according to Claim 20, wherein the means for generating an estimated accuracy score associated with each generated digital code of the at least one digital code.

22. The system according to Claim 20, wherein the means for comparing determines
5 if the comparison results are within a predetermined image recognition certainty threshold.

23. A computer-readable medium storing a series of programmable instructions configured for execution by at least one processor for performing an optical code read verification method comprising the steps of:

10 receiving optical code image data and object image data associated with the optical code read and an object associated with the optical code, respectively;

generating at least one digital code in accordance with the optical code image data;

querying a database for accessing at least one stored object image data entry associated with at least one respective stored digital code that substantially matches the respective at least
15 one generated digital code; and

comparing the received object image data with the at least one accessed object image data entry.

24. The computer-readable medium according to Claim 23, wherein the method
20 further comprises the step of determining if the comparison results are within a predetermined image recognition certainty threshold.

25. A data signal embodied in a transmission medium for execution by at least one processor for performing an optical code read verification method, the data signal comprising:

a code segment including instructions for receiving optical code image data and object image data associated with the optical code read and an object associated with the optical code,

5 respectively;

a code segment including instructions for generating at least one digital code in accordance with the optical code image data;

a code segment including instructions for querying a database for accessing at least one stored object image data entry associated with at least one respective stored digital code that

10 substantially matches the respective at least one generated digital code; and

a code segment including instructions for comparing the received object image data with the at least one accessed object image data entry.

26. The data signal according to Claim 25 further comprising a code segment
15 including instructions for determining if the comparison results are within a predetermined image recognition certainty threshold.

27. An imaging system for verifying at least one of an optical code read and an RFID read comprising:

20 RFID reader circuitry for selectably performing the RFID read by receiving RFID tag data from an RFID tag;

an imaging engine having an image sensor for imaging an image of an object and generating object image data and selectably reading an optical code associated with the object by imaging the optical code and generating optical code image data;

a database storing a plurality of digital code sets having at least one digital code and an object image data entry associated with a digital code set of the plurality of digital code sets, wherein the object image data entry associated with the digital code set of the plurality of digital code sets represents at least one image of an object that is assigned the at least one digital code of the digital code set; and

a processing unit for receiving and processing at least two of the RFID tag data, the object image data, and the optical code image data, said processing unit comprising:

an RFID decoding module for decoding the RFID tag data and generating at least one first digital code;

a code generation software module for processing the object code image data and generating at least one second digital code;

a database query module for accessing the database and retrieving at least one object image data entry associated with at least one stored digital code set that includes a digital code that substantially matches at least one of the at least one first digital code and the at least one second digital code; and

a comparator module for comparing the object image data with the at least one retrieved object image data entry.